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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/802,426

03/17/2004

Trevor Adrian

15474.3.1.1

3868

22913

7590

08/07/2008

WORKMAN NYDEGGER  
60 EAST SOUTH TEMPLE  
1000 EAGLE GATE TOWER  
SALT LAKE CITY, UT 84111

EXAMINER

LE, HUYEN D

ART UNIT

PAPER NUMBER

3751

MAIL DATE

DELIVERY MODE

08/07/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/802,426	<b>Applicant(s)</b> ADRIAN, TREVOR	
	<b>Examiner</b> Huyen Le	<b>Art Unit</b> 3751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-10, 12-24, 27, 29-32, 34-39 and 41-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3, 6-10, 12-20, 41-44, 46 and 47 is/are allowed.
- 6) ☒ Claim(s) 21-24, 27, 29-32, 34-39, 45, 48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 21-24, 27, 29-31, 32, 34-39, 44 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Wolter (4,550,689).

The Wolter reference discloses a portable water heater comprising: a housing 1 having a plurality of walls 2-6 including a top wall and a bottom wall, each having a plurality of openings 62, 40 and 41 (air coming around the burner through openings 42 and the upper housing substantially unobstructed); a heat transfer conduit 34 fluidly connected to a water source and configured to output heated water outside of the housing 1, the heat transfer conduit 34 configured into a coiled tube; and a fuel burner 24 (or 25 or 26) in thermal communication with the heat transfer conduit 34, the fuel burner 24 being entirely outside of the coiled tube 34, the fuel burner being positioned such that the flame of the fuel burner is substantially perpendicular to the coiled tube being directly heated (nothing between the coil 34 and the burner 24 except air so the coil 34 is directly above the burner 24).

Regarding claims 13, 24, the coiled tubing 34 is disposed about a horizontal axis in the housing 1.

Regarding claims 14, 21 and 34, since Fig. 15 of the present application shows a burner 346 one side of the coil 316, the fuel burner 24 of Wolter is situated in relation to the heat transfer conduit 34 (as much as the burner 346 to the coil 316) so as to evenly distribute heat along the length of the heat transfer conduit 34.

Regarding claims 15, 35, the housing 1 further comprises a plurality of plates 17 and 18, the plurality of plates 17 and 18 being disposed about the heat transfer conduit 34 and fuel burner 24 and spaced apart from at least some of the plurality of walls 2-6 of the housing 1.

Regarding claims 16, 27 and 36, a pipe 30 attached to the back wall 2 constitutes one support rod disposed horizontally between two spaced apart vertical plates 18, wherein the heat transfer conduit is supported by the rod 30.

Regarding claims 17 and 37, the heat transfer conduit 34 is fluidly connected to an intake conduit 27 (Fig. 2).

Regarding claims 18, 29 and 38, the intake conduit would essentially be connected to a pump (col. 7, lines 40-44).

Regarding claims 19, 30 and 39, the heat transfer conduit 34 is fluidly connected to an outlet conduit 14, the outlet conduit 14 will be terminating at a shower head (col. 8, lines 52-56).

Regarding claims 20, 31, the upper surface 8 is the surface where the combusted gas is vented out (Fig. 2) so the surface 8 can be used for heating items while the portable water heater is in use.

Regarding claim 32, the heat transfer conduit includes a substantially uncoiled output portion 36 and uncoiled input portion 30.

Regarding claim 44, the housing 1 comprises a top wall 8 and a bottom wall 5, the top wall and bottom walls comprise openings 40-41.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wolter (4,550,689).

Although Wolter does not disclose the burners is a 35,000 BTU burner and fabricated from cast-iron, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select a burner having a certain BTU to best fit a water heater capacity and to fabricate the burner from cast-iron for durability and lost cost, since it has been held that discovering an optimum value of a result effective variable and material selection involve only routine skill in the art.

***Response to Arguments***

5. Applicant's arguments filed 05/20/2008 have been fully considered but they are not persuasive.

6. Applicant argues that submits that at least Wolter's electric solenoid gas valve 20, thermal temperature override switch 39, and optical flame sensor 47 would substantially obstruct air flow rather than allowing the incoming air to flow around the at least one fuel burner and through the housing substantially unobstructed as recited in claim 21. Examiner disagrees with applicant. When the air comes through openings 42 of the wall 17, the coming air flows around the fuel burner 31 and the (upper) housing substantially unobstructed. Thus, Wolter meets the limitations as claimed.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen Le whose telephone number is 571-272-4890. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:00 pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Huyen Le/  
Primary Examiner  
Art Unit 3751